NEW ABSTRACT

A circuit for a discharge lamp includes a first sub-circuit for connecting to mains voltage of a predetermined frequency for rectifying the mains voltage; and a second sub-circuit connected to the first sub-circuit for providing an alternating current, such as a square-wave current, required for the lamp. A control circuit is connected to the first and the second sub-circuit. The control circuit controls the frequency of the alternating current subject to a varying component of the mains voltage rectified by the first sub-circuit.